WHAT IS CLAIMED IS:

- 1. A purified and isolated *Vezf1* gene having the nucleic acid sequence set forth in FIGURE 1 (SEQ ID NO:1).
 - 2. The Vezf1 gene of claim 1, as contained in a vector molecule.
- 3. A purified and isolated nucleic acid encoding a *Vezf1* protein, wherein the *Vezf1* protein has an amino acid sequence as set forth in FIGURE 1 (SEQ ID NO:2).
- 4. The nucleic acid of claim 3, contained in an expression vector and operably linked to a promoter element.
- 5. The nucleic acid of claim 4, wherein the promoter element is not the *Vezf1* promoter.
- 6. An expression vector containing the DB1 gene operably linked to a heterologous promoter element, wherein the promoter element is selectively active in vascular endothelial cells.
- 7. A non-human animal in which one or both endogenous *Vezf1* alleles has been altered by homologous recombination with an exogenously introduced nucleic acid.
- 8. A non-human transgenic animal carrying a transgene which encodes a *Vezf1* protein.
- 9. A non-human transgenic animal carrying a transgene which encodes a mutated *Vezf1* protein.
- 10. A non-human transgenic animal carrying a transgene which is the nucleic acid of claim 1.
 - 11. A non-human transgenic animal carrying a transgene which is the nucleic acid

of claim 3.

- 12. A non-human transgenic animal carrying a transgene which is the nucleic acid of claim 4.
- 13. A non-human transgenic animal carrying a transgene which is the nucleic acid of claim 5.
- 14. A non-human transgenic animal carrying a transgene which is the nucleic acid of claim 6.
- 15. A method of diagnosing a vascular disorder in a subject, comprising measuring the amount of a *Vezf1* gene product, where the gene product is selected from the group consisting of RNA and DNA, in a test sample taken from the subject and comparing that amount to the amount of *Vezf1* gene product in a matched control sample, wherein a difference in the amount of *Vezf1* gene product in the test sample and the control sample correlates with the presence of a vascular disorder in the subject.
- 16. A method of diagnosing a heritable vascular disorder in a subject, comprising characterizing a *Vezf1* gene in the subject and comparing the characteristics of the gene to the normal *Vezf1* gene, where a difference in characteristics of the *Vezf1* gene in the subject and the normal *Vezf1* gene correlates with the presence of a heritable vascular disorder in the subject.
- 17. The method of claim 15, wherein the vascular disorder is a vascularized neoplasm.
- 18. A method of increasing angiogenesis in a tissue of a subject in need of such treatment, comprising increasing the amount of *Vezf1* activity in the tissue.
 - 19. The method of claim 18, wherein the tissue is myocardial tissue.

- 20. The method of claim 18, wherein the tissue is brain tissue.
- 21. The method of claim 18, wherein the tissue contains a wound.
- 22. The method of claim 18, wherein the tissue is a graft.
- 23. A method of decreasing angiogenesis in a tissue of a subject in need of such treatment, comprising decreasing the amount of *Vezf1* activity in the tissue.
 - 24. The method of claim 23, wherein the tissue is a neoplasm.
- 25. A method of identifying an endothelial cell, comprising identifying the expression of a molecule selected from the group consisting of a *Vezf1*-encoding RNA or a *Vezf1* protein in the cell.